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AUTHOR Hickrod, G. Alan Karnes-Wallis; Ward, James Gordon
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ABSTRACT

Discussed in this report is the MacArthur/Spencer Special Project on Educational Finance conducted on the campuses of the Illinois State University. This 5-year research effort is designed to conduct research into equity, adequacy, and efficiency aspects of educational finance in Illinois. When possible, conclusions and generalizations are applicable to other states, but the primary responsibility is to provide empirical research for policy makers within Illinois. Information from the project is sent to all 50 states and several foreign countries, and a special distribution is made to members of the Illinois General Assembly. The project has produced a series of eight monographs, and many more are in progress. It has utilized the services of 14 faculty, staff, graduate students, and consultants. Fifteen doctoral dissertations have arisen tangentially from the major research thrust. Some public service activities have taken place in the pursuit of the goals of the project. The following are appended: abstracts of the MacArthur/Spencer Series on Illinois Educational Finance; a research agenda; a list of doctoral dissertations; a list of the members of the advisory committee; minutes of an advisory committee meeting; and information on studies under subcontract or in progress.
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MACARTHUR/SPENCER PROJECT

Measuring and Monitoring Equity, Adequacy and Efficiency
in the K-12 School Districts in Illinois:
A Five-Year Agenda

G. Alan Karnes-Wallis Hickrod, Director
James Gordon Ward, Associate Director

Center for the Study of Educational Finance
Illinois State University
Normal, IL 61761
(309) 438-5405
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AASCU/ERIC Model Programs Inventory Project

The AASCU/ERIC Model Programs Inventory is a two-year project seeking to establish and test a model system for collecting and disseminating information on model programs at AASCU-member institutions--375 of the public four-year colleges and universities in the United States.

The four objectives of the project are:

- o To increase the information on model programs available to all institutions through the ERIC system
- o To encourage the use of the ERIC system by AASCU institutions
- o To improve AASCU's ability to know about, and share information on, activities at member institutions, and
- o To test a model for collaboration with ERIC that other national organizations might adopt.

The AASCU/ERIC Model Programs Inventory Project is funded with a grant from the Fund for the Improvement of Postsecondary Education to the American Association of State Colleges and Universities, in collaboration with the ERIC Clearinghouse on Higher Education at The George Washington University.

MACARTHUR/SPENCER PROJECT

**Measuring and Monitoring Equity, Adequacy and Efficiency
in the K-12 School Districts in Illinois:
A Five-Year Agenda**

ABSTRACT

The MacArthur/Spencer Special Project on Educational Finance is a five-year research effort conducted on the campuses of Illinois State University in Normal, Illinois and the University of Illinois campus at Urbana, Illinois. The primary purpose of the project is to conduct research into equity, adequacy, and efficiency aspects of educational finance in Illinois. When possible, conclusions and generalizations are applicable to other states as well, but the primary responsibility is to provide empirical research for policy makers within Illinois, especially for the General Assembly of Illinois. The project has produced a series of eight monographs as of the end of 1988 and as many more are in progress. Publications are sent automatically to a mailing list maintained by the Center for the Study of Educational Finance at Illinois State University. A list of available publications is included in Appendix A of this report and can be obtained by contacting Mrs. Gwen Pruyne, Executive Secretary, Center for the Study of Educational Finance, 340 DeGarmo Hall, Illinois State University, Normal, Illinois, 61761.

MACARTHUR/SPENCER PROJECT

Measuring and Monitoring Equity, Adequacy and Efficiency
in the K-12 School Districts in Illinois:
A Five-Year Agenda

The Illinois Educational Finance Project, funded jointly by the John D. and Catherine T. MacArthur Foundation and the Lyle Spencer Foundation—"a five-year journey into the only partially known", is a five-year study agenda from July of 1986 through July of 1991. Project activities occur, for the most part, on the campuses of Illinois State University and the University of Illinois at Urbana. Eight research monographs have been written, published, and distributed to the mailing list of the Center for the Study of Educational Finance as of 1988. This mailing list reaches all 50 states and several foreign countries. Special distributions have also been made to members of the Illinois General Assembly since the matters dealt with in the research monographs consistently have public policy implications. Abstracts of the monographs completed can be found in Appendix A of this report. These studies utilized the services of 14 faculty, staff, graduate students and consultants. In addition, eleven more explorations are underway at Illinois State University and at the University of Illinois, Champaign-Urbana. These additional studies will be conducted by 15 faculty, staff, graduate students, and consultants, as well as a number of persons who will contribute varying degrees of advice and expertise as part of a research team. Brief descriptions of these efforts appear as Appendix B of this report. There have also been 15 doctoral dissertations that have arisen tangentially from the major research thrust and these are briefly described below and listed in Appendix C of this report. Finally, some public service activities have also taken place in the pursuit of the goals of the project and these are described at the end of this report. Appendix D relates to these public activities and consists of the minutes of the last meeting of the Advisory Committee which is attached to this report.

First, with regard to the eight published studies, the Director and Associate Director have cause to believe that they have been well-received by the readership, despite the very bad news that they have had to carry concerning the state of educational funding in Illinois. Perhaps it is fortunate for us that messengers who bring bad tidings are no longer killed. Evidence that these reports do not simply gather dust on the shelf of some professorial cell can be found in several newspapers including the Chicago Tribune and the Chicago Sun Times. Both have carried articles referring to the project. Study #4, entitled "Document a Disaster...", may have the distinction of being one of the few educational finance studies ever read on the floor of the Illinois House and Senate. The easily recognizable red jackets of the study series have also made their way into the more sequestered offices of the Governor. Unfortunately, we cannot claim that they have had a direct impact on the funding process in Illinois and shall return to that difficulty at different places in this report. Honorable mention has also been made of the project in the pages of Illinois Issues and the most extensive account of the project appeared in the July-August 1988 copy of the Illinois School Board Journal.

While study #4 may have achieved the greatest visibility, probably because it was written in terms that journalists could easily use in their columns, the other six research reports have had equal exposure. In particular, study #3, "The Constitutionality of the Illinois K-12 Funding System," has proven more popular than we expected it to, given the rather technical legal nature of the exposition. Advance copies of this report were requested by three legal firms outside Illinois, all in states that had in progress constitutional litigation concerning educational finance. Multiple copies of this, the longest research study of the seven, were sent to the State of Minnesota, and multiple copies went to a group of school districts contemplating legal action in Illinois. We are presently considering an update of that legal study and it will likely be added soon to the studies now in progress.

Study #6, "City Schools, Rural Schools," has also proven more popular than we expected. We attribute this to the continued interest in Illinois in the topic of consolidation and reorganization of schools in the state. Most of the studies in this series are directed to state level policy-makers, but it is clear from the reception of study #6 that when we have something for local or regional audiences, it is quickly taken up. Another example of interest in this study was evidenced by the many requests for a copy of the monograph following mention of it in the September-October 1988 issue of the Illinois School Board Journal.

We have had several advance orders for study #7, "Geographic Cost of Living Differences: An Update." Interestingly, two of these have come from subject areas that have little to do with educational finance; but, rather, these individuals wanted the results of the study for their own public policy purposes. Very likely we shall have to reprint Study #7 not long after it has been distributed.

These reprintings, of course, please us since they show the demand for our product. However, reprintings may pose a problem at a future time in the project as the costs of reprinting bite into the available printing budget for new studies. A partial solution to that problem is outlined later in the report.

An unintended, but nevertheless flattering, tribute to the worth of the published studies comes from the fact that they have been used as instructional materials in several educational finance classes both within Illinois and outside the state. This appears to be especially true with regard to study #1 entitled, "Two Essays on the Political and Normative Aspects of American School Finance: An Historical Perspective". This manuscript also appeared in the Journal of Educational Finance in the form of two articles. Study #2, "A Brief History of K-12 Finance in Illinois or 162 Years in Search of a Perfect Formula," appears to do yeomanry duty in a number of school finance classes and will doubtless need to be reprinted in the near future. Also, there appear to be increasing calls from instructors in school finance classes for study #5, "The Concept of Adequacy in Illinois School Finance." Of course, it was expected that the series would be used on the campuses of Illinois State University and the University of Illinois at Urbana, given the faculty affiliation of the Director and Associate Director of the project. What was not expected was the call from Northern, Southern and Sangamon State Universities for copies, and totally unexpected were calls for copies from Stanford, Berkeley, and the University of Nebraska. This has led us to believe that we may have a product of more than statewide significance, a topic to which we will return later in this report.

Studies in Progress

Turning now to the studies "in progress"--what might be thought of as the "forward list" of publications of the project--one of the most advanced at the present moment is the one entitled, "The Problem of Inadequate Funding of Education in Illinois: Fiscal and Legal Implications." This study contains some potentially explosive information, therefore, we have elected to delay publication until after the November election for fear of seeming partisan. Nevertheless, we shall have it ready in good time for the Spring Session of the General Assembly. In essence, the new study builds upon evidence presented in study #4, except that the results (if it can be believed) are even more stark and more disastrous than the results revealed in study #4. The newspapers should have a real heyday with this one. As an academically-based research unit, we are encountering something of a dilemma here. We are not a political action group. Indeed, we take some pains not to be so regarded. Nevertheless, there are here some ethical responsibilities to speak out if the educational funding situation is as deplorable as the data suggest. At present, we are trying to straddle this issue by releasing "advance copies" to selected members of the General Assembly simultaneously with, or slightly before, the release to the newspapers. But some of the reporters now call and ask if we have anything "hot" for them. Clearly the timelines of a researcher, and those of a journalist, are not the same. We have also been circumspect on the political party issue. Both the Democratic and the Republican sides of the aisle receive the material at the same time. We do not feel as if we are to blame if one side makes more use of it than the other.

The second item on the "forward list" that is conceptually--if not computationally so--rather far along, is one entitled, "Further Dimensions of Equity Analysis in Illinois Public Schools." (In all instances these titles must be understood to be working titles and may well be changed prior to final publication.) This study is a straightforward application of statistical procedures used in prior equity studies at the Center, but a major conceptual change is inherent in this study. Rather than looking at a notion of "wealth neutrality" which holds that there should be no meaningful positive linear or curvilinear relation between school district wealth and expenditures per pupil, the position taken here is that public schools in the United States should also strive for no meaningful positive linear or curvilinear relationship between school district wealth and any school output measures such as test scores; also that a narrowing of mean test scores between school districts is just as desirable as a narrowing of expenditures per pupil between school districts. While the statistical techniques are directly adaptable from the older equity studies, there is a major shift in value assumptions behind the empirical work. We are currently struggling with that change in value positions. It is likely we shall have to call in some help from the Sociology Department or significant others as we get into the vexing question of just what constitutes, "equality of educational opportunity" and related conceptual matters. However, we are proceeding to the empirical calculations without necessarily waiting for the last crossing of the "t's" and dotting of the "i's" in the conceptual and normative area.

The third study on the "forward list," currently appearing under the working title of "An Exploratory Analysis of Economic Efficiency in Illinois Schools," is perhaps the "stickiest wicket" of the lot. Initial statistical analysis with the variable, "cost per unit of test score," do show some interesting relationships between size of school district and other manageable variables to the dependent variable. However, there is a major problem of the relationship of the socioeconomic nature of the district to the test scores. Here the staff keeps tripping over an old problem in educational financial research.

Numerous studies tend to show that, once the socioeconomic level of the district has been controlled, there is no statistically significant relationship between expenditure and many output measures including test scores. However, there is an almost impenetrable barrier in this type of research. It has to do with the fact that socioeconomic variables are also very highly correlated with expenditures. Therefore, when one takes out the effect of the socioeconomic variables, one also takes out the effect of expenditures. For example, if all Scots on the Isle of Harris drink uisge-beatha (whiskey) and if all Scots on the Isle of Harris speak the Gaelic Albanach, then there is no way of telling whether the consumption of whiskey is more a matter of speaking Gaelic or if it is of being a Scot. Similarly if all Calico cats eat fish and if all Calico cats are female, then there is no way of determining if being a female cat is more of a determinant of eating fish or being a Calico cat. Districts that are rich and that also have low expenditures and low test scores and districts that are poor and have high expenditures and high test scores are as scarce as non-Gaelic speaking prohibitionists on the Isle of Harris. This ancient problem of the lack of independence in variables in regression analysis is holding up this particular study. A more practical limitation on the study is that we are still awaiting the third year results of the statewide evaluation referred to popularly as the "school district report cards." However, data are scheduled to be released from Springfield at about the same time that this report is being written, so we hope to push ahead with "all deliberate speed."

Our higher education finance project has the great advantage of building upon the vast data base created by the late, distinguished professor of educational administration, M. M. Chambers. The professors working on this data base are asking some very interesting state-to-state comparative questions. Why do some states consistently fund higher education at more adequate levels than some other states? Are there any persistent regional patterns in funding for higher education and if so, what do they mean? Perhaps most intriguing of all, at least to some of us, what is the relationship, if any, between levels of funding for K-12 education and levels of funding for higher education? Also does the presence or absence of constitutional litigation in the K-12 area affect the level of funding for higher education?

Finally, two other studies are underway on special topics, one at the ISU Campus and one in Boston, Massachusetts. The special education funding study is addressing the crucial policy question of whether funding for the education of the handicapped in Illinois cuts into funding for non-handicapped students at least in poor districts in the state? This is alleged to occur, but hard evidence has been lacking. There are some very "sticky" ethical judgments in this area as well. What is the interaction here between equity concerning students in rich areas and students in poor areas versus equity between handicapped and non-handicapped students? As always in any kind of financial study of special education, there appear to be data availability problems that are much more difficult than financial studies in the "normal" area.

The sole historical study we have underway relates to our concern with economic efficiency in the public schools. In the latter part of the nineteenth century the British government experimented with a payment system it called, "reward for result." We have contracted with an historical scholar, a specialist in Victorian England, to do research on this particular chapter in British history. We have also received help on this study from a totally unexpected source, e.g., the office of a former Prime Minister of Great Britain, the Right Honorable Edward Heath, M.B.E., M.P. We are properly appreciative of this unusual show of international cooperation. At the conclusion of this particular study we have promised to forward copies to the Research Division of the

House of Commons Library which has been supplying some leads to our researcher. The Right Honorable Member believes that our research might have some bearing on the new education bill introduced recently by the Thatcher government. Conversations with a Scottish faculty member visiting the Center here at ISU also suggests to us that our findings in this area may hold some interest north of the Tweed. One of the more interesting aspects of this whole effort is that something begun as an initially rather narrowly focused set of public policy problems in Illinois does not seem really to have any intellectual boundaries on it at all. Perhaps the "robe of learning is indeed a seamless garment."

Studies underway at the University of Illinois at Urbana-Champaign include a major study of regionalism in Illinois school finance entitled, "The Geopolitics of School Finance: Regionalism in Funding Illinois Public Schools." The research team, headed by Dr. Ward, will investigate equity and adequacy concepts within the State of Illinois on a region-by-region basis, and relate the differences found to social, economic, and political factors. The study is based on a design developed in the early 1970s by the New York State Commission on the Quality, Cost and Financing of Elementary and Secondary Education and used in that state to assist in reforming the school finance system.

Also at Urbana-Champaign, there is a major study underway by Professor Ward and doctoral student Joanne Clauss on the origins of fiscal crisis in the Chicago public schools. The inquiry involves analysis of longitudinal accounting and financial reporting data according to a methodology to analyze cities in fiscal difficulty which was developed at the Joint Center for Urban Studies of the Massachusetts Institute of Technology and Harvard University. The results should provide insight into the continuing financial problems of the Chicago public schools and may offer some potential solutions.

In a related area, a team of researchers at Urbana-Champaign have begun an investigation of fiscal difficulties of large school districts in the Midwestern region, with an emphasis on Illinois. The purpose is to better understand how social, demographic, economic, and political factors influence the fiscal health of major school districts. This investigation is actually a cluster of related studies which will employ both quantitative and qualitative methods to try to increase our understanding of how state policies can be altered to provide educational services more adequately, equitably and efficiently in large school districts.

Preliminary research is beginning on the concept of efficiency and its application to public school finance. This will involve a hermeneutic study of the fundamental elements of efficiency as an economic concept and as a normative element in social policy. This study will form the foundation for later work on efficiency in Illinois school finance.

Dissertations Related to School Finance

Although the primary purpose of the grant is to do research on educational finance in Illinois and to report those results to the policy-makers in Illinois, in particular to the General Assembly, a secondary or spin-off effect is to stimulate graduate work in this public policy area at both the University of Illinois campus and the ISU campus. Four dissertations bear upon the research effort at ISU, two of which have been completed and two of which are still in progress. The two that have been completed are those by Richard Yong and by Patricia O'Connell. The details of both dissertations are too elaborate to report here, and we are interested here only in the results as they bear upon the major thrust of the foundation-supported research effort. What stands out in

both the Yong and O'Connell dissertations is the heavy effect of the percent of poverty-impacted students on the test scores of Illinois school districts. Fully two-thirds of the variance in test scores is predicted by the single variable of poverty impactation. No other variable investigated to date comes anywhere close to predicting the achievement or lack of achievement in Illinois school districts as does poverty impactation. The policy implications are significant. In 1973, Illinois adopted a factor in the general grant-in-aid system which distributes state general aid funds directly according to the poverty-impactation in the district--*ceteris parabus*, the greater the district's poverty impactation the more funds are received from the state. Whether it was a brilliant insight, or whether it was pure luck (we leave it for history to determine), it is clear now that the selection of poverty impactation as a factor in determining the distribution of state aid in 1973 was the correct way to go in Illinois. Only one other state, Minnesota, puts that kind of factor into its distribution formula. Since poverty impactation is the single most depressing factor in test scores, it seems appropriate to provide more aid to those districts with greater poverty impactation. Regrettably, we cannot prove that the additional state dollars do much to offset the effect of poverty impactation on test scores; but, at least, we feel we are putting the money in the right place.

Two other dissertations are in progress on the ISU campus and should contribute at least tangentially to the research thrust of the project. A dissertation by Deborah Gunter looks into the Illinois record on the finance of higher education in Illinois over the last decade. Although not completed as yet, it is clear from the Gunter dissertation that K-12 education is not the only area of education that has not been adequately supported over the last ten years. Her data clearly show that provision for community colleges in the state has lagged behind other public services. Her data also suggest that funds for the instructional function in higher education have not kept up with funds devoted to other functions in higher education, e.g., academic services, student services, etc. The second dissertation, being written by Kay Oldham-Pangle, also casts some light upon the economic efficiency goals of this research. Preliminary results from this dissertation suggest that the size of high schools is directly related to both the test scores and to costs per student, and to a new variable of interest: cost per unit of test scores. At the present stage of analysis it would appear that "bigger is better," e.g., larger high schools in Illinois are associated with higher test scores and also larger high schools are more economically efficient. However, the same difficult interaction problems plague this research that trouble all research in this area--and to which we have previously alluded--e.g., the socioeconomic variables are highly correlated with the test scores and with the cost variables. Nevertheless, this is a most interesting study in that its findings are quite opposite from other findings in the field which contend that "smaller is better." The explanation of the difference probably lies in the fact that this study looks only at Illinois school districts with one high school; in effect, therefore, looking at the size of the high school, itself, as the variable of interest. Most other research is concerned with the size of a district, rather than the size of an attendance unit or building.

Eleven doctoral dissertation related to the project are in process at the University of Illinois at Urbana-Champaign. Nine of them are being undertaken by students in the innovative School Executive Doctoral program, which provides a uniquely structured doctoral program for practicing school administrators. These nine include two studies by William H. Phillips and Francis Rink on school district reorganization and consolidation in Illinois and possible alternative state policies to improve education in small school districts. Tax increment financing districts are being investigated by Eugene Zalewski and school district foundations are being studied by Robert Bratcher. Relating fiscal stress in school districts to student achievement data is the focus of Kenneth Geraghty's study, while James D'Amico is working on a study to predict fiscal stress in small elementary districts in suburban Chicago. Equity in school funding in elementary school

districts is Robert Varga's research topic. Maureen Hager is undertaking research on the effects of state-legislated property tax exemptions on public school funding and Fred Kieslar is working on a study to propose a model for full state funding for Illinois Public schools.

Other doctoral studies related to the project include Concetta Hyland's Delphi study of national education leaders on the potential effects of Hispanic demographic trends on American public school policy and administration. The results of this study should be particularly critical for large, urban school districts such as Chicago. Also, Kevin Sullivan is undertaking a study to develop a referendum campaign model for Illinois public schools. Results from all eleven of these studies should be available by mid-1990.

Public Service, Policy-making, and Legislative Process

This particular grant from the two foundations was made with the understanding that the research findings would feed into the policy-making and legislative process as soon as that was reasonably possible. Accordingly, the Director and the Associate Director have undertaken a number of public service activities associated with the major purposes of the grant. In the first year of the grant, both the Director and Associate Director met with the newly-created Citizens Commission on School Problems which was established to fill the void left by the demise of the Illinois School Problems Commission. During that time the legislature was under the influence of a "sunset" provision and it looked as if the general purpose grant-in-aid would need to be replaced by a certain date. As events unfolded, the "sunset" provision was removed and the urgency for replacement of the grant-in-aid formula was removed with it. Nevertheless, we feel that the Citizens Commission did fulfill a useful purpose, and that the Director and the Associate Director were able to make some contributions to the goals of that organization. On several instances, they offered expert testimony in Springfield to this commission on both the results of the research to date, and the on-going research of the grant. Of course, they stand ready to do that again upon call.

The project also has attached to it an Advisory Committee upon which sit members of the Illinois General Assembly. Not unexpectedly, it has proven difficult to get these members together. However, at least one meeting of this group was held in Springfield and the minutes of that meeting are attached to this project report. We tend to use this group to review a "batch" of our research projects, as soon as they have been distributed, and to make suggestions concerning the prospective research agenda. We intend to schedule a second meeting as soon as we have enough research projects published to warrant their attention again. It is possible that we are not using this group in the most productive manner and we are open for suggestions on this or on any other matters related to the management of the grant.

On occasion we will undertake a short term research assignment arising from this group that does not necessarily end up in a publication. Of course, such activities are limited since the research agenda that ends up in a published product is our standard mode of operation and is of primary concern to us. (It may be that, as academics, it is the mode of operation with which we are most comfortable.) We did undertake a brief investigation into some tax relief models, including a conference with the Director of the Illinois Tax Federation, when it appeared that educational funding increases in Illinois might hinge upon agreement over local property tax relief. Essentially, this was in the form of a few memoranda and centered on the possibility of creating a pool of funds earmarked for property tax relief, which could be accessed by high tax rate districts. This was to be the price for additional funds which would not be used for property tax

relief; but, rather, would be used for raising the general level of support for educational services. Nothing came of this from a legislative standpoint, however, the basic idea of trading some property tax relief for some new money in education will not go away, and we think perhaps it might be useful to renew this correspondence at some time in the future.

There often need to be formal mechanisms to help university-based researchers to assist public policy-makers in their work. For many years, the Center for the Study of Educational Finance at Illinois State University has ably fulfilled that function. In Fall 1988, the University of Illinois at Urbana-Champaign created a similar unit, the Office of Education Policy and Leadership, to help forge formal linkages between the resources of the university and the needs of education policy-makers and school administrators. The Office is being directed by Professor Ward, the MacArthur/Spencer Project Associate Director. Among the studies sponsored by this Office is a Delphi survey of Illinois education policy-makers entitled, "Illinois Schools for the Twenty-First Century." This study will identify major policy issues facing Illinois public schools for the 1988-90 period and for the 1990-2000 period. Results of this study should contribute a great service for the State of Illinois. Strong interest in this study has already been expressed by the Governor's Office and by leaders of the General Assembly.

Prognosis for the Future

Finally, as to the prognosis for the future of the grant: we think we are about on target. The availability of test score data from the Illinois school districts has held up our progress on the economic efficiency studies, but we knew that when we started the project and have budgeted into the future accordingly. We fully expect to make more progress on the economic efficiency studies in the next calendar year. We seem to be a little short on graduate students on the ISU side, but that seems to be more than made up on the University of Illinois side of the research. If there are no health problems to lower the productivity of the staff, it seems that we will march on through most of the "forward list" as it has been discussed in this report. At this point in time, we think it may be possible to publish as many as twenty research monographs with the funds supplied by the two foundations. Given the practical policy orientation that these publications have, it seemed appropriate, and it still seems appropriate, to publish them in soft cover form, and to place them into the hands of legislators as soon as we could. However, we now believe that at some point we should try to interest a commercial publisher in hard-bound copies of the studies. This could be done either at the end of the whole series, or it could be done in two volumes, with the earlier studies being one volume and the latter studies being the second volume. As has been indicated earlier, we have some evidence that the studies are of interest beyond an Illinois audience but whether that market is sufficient to interest a commercial publisher is another question. In any event, this progress report is going to a few publishers to test the waters.

Shortly after the publication of this series of research monographs began, the wife of the Director died following a long and difficult illness. It was decided to dedicate the entire series to her memory. That was a gesture most appreciated by the Director and her surviving family. In return, may we wish the reader, "slante, sonus, agus beartis," which in the Scot Gaelic means "health, wealth, and happiness."

Appendix A

ABSTRACTS OF THE MACARTHUR/SPENCER SERIES ON ILLINOIS EDUCATIONAL FINANCE

1. Two Essays on the Political and Normative Aspects of American School Finance: An Historical Perspective, March 1987, 30 pages, G. Alan Karnes-Wallis Hickrod and James Gordon Ward.

This monograph explores the political foundations of educational finance in the United States. The first essay outlines the contribution of public education to a democratic form of government and was written partially in response to a challenge to public education funding which appeared in Forbes magazine. The second essay surveys the basic concepts present in the modern study of educational finance, grounding that survey in a review of the first textbooks written in educational finance in the USA.

2. A Brief History of K-12 Finance in Illinois or 162 Years in Search of the Perfect Formula, April 1987, 14 pages, G. Alan Karnes-Wallis Hickrod

This monograph is a brief historical study of K-12 funding in Illinois stretching from before the Civil War to the present. It stresses the legislative history of the general grant-in-aid formula for K-12 education.

3. The Constitutionality of the K-12 Funding System in Illinois: Legal Issues, May 1987, 150 pages, David L. Franklin and Others.

A comprehensive and detailed discussion of constitutional challenges to the K-12 funding systems in nineteen states, this study focuses on the characteristics of the winning briefs in the litigation. While it does not actually write the brief, it denotes the points of law that would have to be won in order to mount a successful constitutional challenge. Applications are then made from this history of litigation to the particular Illinois situation. It is considered to be a companion volume to report #4 which deals with factual data that might be used in educational finance litigation in Illinois.

4. Documenting a Disaster: Equity and Adequacy in Illinois School Finance: 1973-1988, December 1987, 44 pages, G. Alan Karnes-Wallis Hickrod and Others.

This is a continuation of the monitoring series on the equity effects of the Illinois K-12 general grant-in-aid which has been published by the Center for the Study of Educational Finance for many years. In addition, it begins the investigation of the adequacy of the support system in Illinois. It has been widely quoted by the press for its stark conclusion: "We are doing a lousy job of school finance in Illinois."

5. The Concept of Adequacy in Illinois School Finance, October 1987, 24 pages, James Gordon Ward.

This is an exploration of the concept of adequacy including some operational definitions of the term. It also includes some empirical evidence and is related to the findings on adequacy of funding contained in report #4.

6. City Schools. Rural Schools, March 1988, 10 pages, James Gordon Ward.

This is a study of a nine-county region in East Central Illinois. Its focus is on the alleged benefits of school district consolidation. The findings cast some doubt on the oft-repeated charge that small rural districts offer sub-standard education.

7. Geographic Cost of Living Differences: An Update, August 1988, 20 pages, Walter W. McMahon.

This is an econometric study of geographic cost-of-living differences between states in the United States and between counties within Illinois. Geographic cost-of-living indices have many uses. In education these indices are used to adjust educational costs between geographic areas to obtain "constant" or "real" dollar differences in educational spending. The indices are being used in on-going research at the Center for the Study of Educational Finance in the Illinois State Board of Education in Springfield.

Note: All of these studies are available from the Center for the Study of Educational Finance, 340 DeGarmo Hall, Illinois State University, Normal, Illinois 61761. (309)438-5405. There is a nominal charge of \$1.00 each to cover postage and handling. Individuals or organization not now on the Center's mailing list may ask to be placed on the list in order to receive, free of charge, all future studies in the series.

Appendix B

RESEARCH AGENDA

- A. Working Title: The Problem of Inadequate Funding in Illinois Education: Fiscal and Legal Aspects

Looks at the standing of Illinois relative to other states in funding levels and changes in that rank order with the passage of time. Computes effort indices (elasticities) for all fifty states and looks at those rank orders. Sets up a test for the hypothesis that decisions at the state Supreme Court level affect funding levels in various states. Makes recommendations relative to changes in the Constitution of Illinois to further promote the adequate funding of education. Unusual in that it also looks at higher education funding as well as K-12 funding. May at some point split some of this later work into item D below.

Faculty involvement: Hickrod, Franklin, Hines, McCarthy, Klass (ISU)
Staff: Pruyne, Polite, Liu, Butdisuwan (ISU)

- B. Working Title: Exploratory Analysis of Economic Efficiency in Illinois Schools

This study works with cost per unit of test score derived from the three Illinois "report card" instruments. Since the variable "cost per unit of test score" is so poorly studied, we are spending a fair amount of time just looking at the frequency distributions. However, we fully intend to construct simple econometric models on this variable and to look for economies of scale and other standard economic concerns. The study is on hold for moment awaiting the third district report card data.

Faculty involvement: Hickrod, Chaudhari (ISU), Ward (U of I)

- C. Working Title: Further Dimensions of Equity Analysis in Illinois Public Schools

This study extends the equity analysis published in previous Center studies, but opens up a new wing of research by using the "report card" data as a component of the equity analysis. Explores the relationship between wealth and test score; expenditure and tests score; etc., and applies the same type of "equity tests" used in previous Center studies. Is viewed as the start of a much longer time-series of which this study will present the results of only the first three years.

Faculty involvement: Hickrod, Chaudhari (ISU), Ward (U of I)

- D. Working Title: Higher Education Funding in Illinois

Looks at the record of funding of Illinois in the light of the data accumulated by GRAPEVINE. Also works on conceptual problems in this area. Has similarities to Agenda A and is currently running in tandem with it.

Faculty involvement: Hines, Hickrod (ISU)
Staff: Pruyne, Polite, Butdisuwan (ISU)

- E. Working Title: Geopolitics of Educational Funding in Illinois.
- Looks at financial and political variables from a regional point of view within the State of Illinois. Has a "size of school district" component within it and builds upon City Schools, Rural Schools, the study published by Ward and distributed through the Center.
- Faculty involvement: Ward (U of I)
- F. Working Title: Framework for the Study of Economic Efficiency in Illinois Public Schools
- Sets forth the data requirements for an analysis of economic efficiency in the United States and in the individual fifty states. Grows out of Professor McMahon's interest in the economics of education in developing countries. May be followed in the next fiscal year by an empirical analysis based upon the present conceptual approach.
- Faculty involvement: McMahon (U of I). Some interest expressed by Professor Ram of ISU.
- G. Working Title: Special Education Funding in Illinois
- Focuses upon the problem of the burden on local funding that special education places on certain kinds of school districts. Also explores traditional equity aspects of special education funding. Uses new approaches to the gathering of financial data for special education studies.
- Faculty involvement: Arnold, Chaudhari (ISU)
- H. Working Title: The British Experiment with "Reward for Result"
- An historical study of the British government's experiments with Parliamentary Grants given for test results. This took place during the latter half of the nineteenth century in Great Britain. Looks at reasons why the "reward for result" approach was developed and also why it was eventually rejected. Study is conceptually related to items B and F.
- Faculty involvement: Through Professor Brendan Rapple, Boston University.
- I. Working Title: The Geopolitics of School Finance: Regionalism in Funding Illinois Public Schools
- An investigation of equity and adequacy concepts within the State of Illinois on a region-by-region basis and the relationship of the differences found to social, economic, and political factors.
- Faculty involvement: Ward (U of I)
- Others: Research Team (U of I)
- J. Working Title: Origins of Fiscal Crisis in the Chicago Public Schools.
- An analysis of longitudinal accounting and financial report data according to a methodology developed at the Joint Center for Urban Studies, Boston, Massachusetts.
- Faculty involvement: Ward (U of I)
- Doctoral Student: Clauss (U of I)

- K. Working Title: Fiscal Difficulties of Large School District in the Midwestern Region, with Emphasis on Illinois.

The purpose is to better understand how social, demographic, economic and political factors influence the fiscal health of major schools districts.

Faculty involvement: Ward (U of I)

Others: Research Team (U of I)

- L. Working Title: The Concept of Efficiency and Its Application to Public School Finance.

This will involve a hermeneutic study of the fundamental elements of efficiency as an economic concept and as a normative element in social policy.

Faculty involvement: Ward (U of I)

Appendix C

DOCTORAL DISSERTATIONS

Illinois State University

Deborah Gunter, "An Analysis of Financial Support to Education: Illinois"

Patricia O'Connell, "An Analysis of Selected 1985-86 School Report Card Variables and Student and District Performance in Illinois Public Schools," May 1988

Kay Oldham-Pangle, "The Effect of Size on Efficiency and Effectiveness in Single Attendance Center High School Districts."

Richard S. Yong, "The Impact of Wealth and Size on Selected Accountability Indicators of Illinois School Districts," May 1987

University of Illinois (Champaign-Urbana)

Robert Brutcher, Study related to school district foundations

James D'Amico, Study to predict fiscal stress in small elementary districts in suburban Chicago.

Kenneth Geraghty, Study relating fiscal stress in school districts to student achievement data

Maureen Hager, Research on the effects of state-legislated property tax exemptions on public school funding

Concetta Hyland, A Delphi study of national education leaders on the potential effects of Hispanic demographic trends on American public school policy and administration

Fred Kieslar, A study to propose a model for full state funding in Illinois public schools.

William H. Phillips, Study of school district reorganization and consolidation in Illinois

Francis Rink, Study of possible alternative state policies to improve education in small school district

Kevin Sullivan, Study to develop a referendum campaign model for Illinois public schools.

Robert Varga, Research topic related to equity in school funding in elementary school districts.

Eugene Zalewski, Investigation of tax increment financing districts.

Appendix D

ADVISORY COMMITTEE

Dr. John Corbally, President, MacArthur Foundation (or his designee)

Mrs. Marion Faldet, Vice President, Spencer Foundation (or her designee)

The Honorable Arthur Berman, Senator, Illinois General Assembly

The Honorable Gene Hoffman, Representative, Illinois General Assembly

Dr. William Hinrichs, Illinois State Board of Education

Dr. G. Fred Hess, Executive Director, Chicago Panel on Public School Finance

Mr. David Elder, Republican Senate Research Staff

Dr. Fred Bradshaw, Office of Senator Arthur Berman

Dr. G. Alan Karnes-Wallis Hickrod, Director, Illinois State University

Dr. James G. Ward, Associate Director, University of Illinois

MINUTES
Advisory Committee, MacArthur/Spencer Project
April 27, 1988

Members Present: Senator Arthur Berman, Representative Gene Hoffman, Mr. David Elder (Senate Republican Research Staff), Dr. Fred Bradshaw (Senator Berman's Staff), Professor James G. Ward and Ms. Joanne Clauss (University of Illinois, Urbana), Professor G. Alan Hickrod, Dr. Ramesh B. Chaudhari, Dr. Ben C. Hubbard, and Ms. Gwen B. Pruyne (Illinois State University).

The meeting was convened at 3:30 p.m. on April 27, 1988, in the Conference room adjacent to Senator Berman's Office in the state capitol. Director of the Project, G. Alan Hickrod, presided.

Critique of Studies Published to Date: The five monographs which have been published to date were discussed. It was noted that Mr. Brimelow, the author of the cover story in Forbes Magazine which was discussed in monograph number 1, has responded to the essay in The Journal of Education Finance (Fall 1987), and that Dr. Hickrod's has written a response to Brimelow which is being considered for a future issue of the Journal.

Professor Ward, co-director of the project, explained in some detail the research which resulted in the adequacy study (number 5 in the series). The operational definition of adequacy is difficult to determine and Dr. Ward outlined the rationale of the approach taken in the study.

Studies in Progress: The attached outline lists the studies currently under contract or in progress. The group considered each item on the outline. It appeared that all were in accord with the suggested future studies. Most of the discussion centered on sources of data, the relationships between types of information which are available, the reliability of data, and the effect the various types of data might have on the predicted outcome. Among the questions and concerns were the following:

1. The accuracy of the assessment test results currently being administered.
2. Sources of data for the geopolitical regions on the state
 - a. Use of the seven DECCA regions?
 - b. County demographics - availability of current statistics
--possibility of materials from Roy Treadway, ISU
 - c. Microcomputer software for data and display
3. Effects of nonpublic school populations on the special education study
4. In study "Who Got What....."
 - a. relationship between various taxes such as residential, corporate personal property replacement, and farmland taxes
 - b. Federal law number 874 money
 - c. Unevenness of the farmland assessments
 - d. Sources of data: Department of Revenue, professor at U of I in the Department of Agriculture
5. In Higher Education study:
 - a. Need to take out community college appropriations
 - b. Examine tuition burden in Illinois in comparison with other states
Suggested study of tuition done by the National Association of State Universities and Land-Grant Colleges

Other studies suggested:

1. Teacher retirement system: regional inequities and effects which occur due to differences in the methods of funding among the districts (proportions paid by individuals versus proportions paid by boards).
2. An analysis of sources of income in Illinois in comparison with analyses in other states (where such is available).
3. Some concerns prompted by the demand for the reorganization of the Chicago school district:
 - a. Local effort for schools in Chicago
 - b. Total tax burden in Chicago (municipal overburden)
 - c. Effort and tax burden as compared with other districts in the state
4. Concerns which have arisen in relation to passage of an income tax increase
 - a. Need to tie to property tax relief
 - b. Need to assure an increase in funding for education

Meeting was adjourned at 5:30 p.m.

STUDIES UNDER SUBCONTRACT OR IN PROGRESS
MacArthur/Spencer Illinois School Finance Project
Prof. G. A. Karnes-Wallis Hickrod, Director
Prof. James G. Ward, Co-Director
April 1988

I. STUDIES UNDER SUBCONTRACT

- A. Subcontracted to Prof. Walter McMahon, University of Illinois, Urbana-Champaign, who will reconstruct a new cost-of-education index that can be used to adjust educational costs between states. This is essential for comparisons in standings between Illinois and other states on a variety of school finance statistics. Related to previous adequacy studies. Expected in June or July of 1988.
- B. Historical study of the British experience with "payment by results."

Undertaken at the suggestion of the former Prime Minister of Great Britain, the Rt. Hon. Edward Heath, M.B.E., M.P. Subcontracted to Prof. Brendan A. Rapple. Will act as background for "efficiency" studies in Illinois. Has recently become more important as the state of Connecticut is expected to pass legislation that will make state payments partially on the basis of test results. The British operated a system of state subvention for test results from 1862 to 1895, and the reasoning behind both the adoption and the abandonment of the system is still of interest. Will start in summer of 1988.

II. STUDIES UNDERWAY AT NORMAL AND AT URBANA-CHAMPAIGN

- A. Relationship of Size to Economic Efficiency

The first of a series of empirical "efficiency" studies, looks at the relation of district size to three different variables: cost per pupil, test results (from school district report card), and cost per unit of test score. Seeks the existence of an "optimum" school district size relative to all three variables. Coordinated with a dissertation by K. Pangle. Directed by G. A. Hickrod and R. B. Chaudhari.

- B. The Concept of Efficiency in Public School Finance

A conceptual look at efficiency similar to the one previously published on adequacy. Looks at different definitions of efficiency and the relationship of professional effectiveness to economic efficiency. Directed by J. G. Ward.

C. The Geopolitics of School Finance: Regionalism in Funding Illinois Public Schools

Most analysis of Illinois public schools is done on a state-wide basis. This study looks at equity and adequacy concepts within the state on a region-by-region basis, and relates these differences to the politics of Illinois school finance. Directed by J. G. Ward.

D. Correlates of Effectiveness as Revealed in the Illinois School District Report Card

A consolidation of two doctoral dissertations which looked at predictors of school achievement as revealed by the Illinois School District Report Card. Implications for school finance as presented. Directed by Dr. P. O'Connell and Dr. R. Yong.

E. Correlates of Change in Equity and Adequacy

Previous studies in the series have documented changes in the equity and adequacy indexes through time. This study seeks to build an econometric model that would explain and predict these changes by changes in other state characteristics. Directed by G. A. Hickrod, R. B. Chaudhari, and P. O'Connell.

F. Special Education Funding in Illinois

Explores the presence or absence of equity problems in special education in Illinois. Also explores the strain on local resources caused by funding programs for the handicapped. Directed by Prof. Robert A. Arnold and Dr. R. B. Chaudhari.

G. Who Got What and Who Raised What?

Previous studies in the series combine the general state aid with the funds locally raised. It is also possible to study each of these separately, e.g., look at the distribution of general state aid and the monies locally raised. In the past it has been found that wealthy districts tend to pass referenda more often than poorer districts and hence raise local funds easier than poor districts. It is not known however, if this phenomenon is becoming stronger with the passage of time. The simple distribution of state aid, e.g., "who go what," is always politically interesting. Directed by G. A. Hickrod and R. B. Chaudhari.

H. Adequacy in Higher Education Funding

Study of the adequacy or inadequacy of higher education funding in Illinois. Study uses some indicies used in previous publications for K-12. Directed by Profs. Hines, McCarthy and Strand.